



Safety Data Sheet dated 9/2/2015, version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: DIGRAIN ONE SHOT

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

Insecticide - Biocidal use

Uses advised against:

Do not use for purposes other than those stated in "Recommended uses".

1.3. Details of the supplier of the safety data sheet

Company:

LODI UK

Pensnett Trading Estate 3rd Avenue

West Midlands

DY6 7FD KINGSWINFORD United Kingdom

Tel. 00 44 1628 779 027

Competent person responsible for the safety data sheet:

fds@lodi.fr

1.4. Emergency telephone number

NPIS (National Poison Centre) - Birmingham Unit

[To be called by medical staff or physicians]

City Hospital, Birmingham, B18 7QH, UK

Tel: 0844 892 011

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

F Highly flammable

Xi Irritant

N Dangerous for the environment

R Phrases:


R11 Highly flammable.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.




EC regulation criteria 1272/2008 (CLP)

 Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.

 Warning, Eye Irrit. 2, Causes serious eye irritation.

 Warning, Skin Sens. 1, May cause an allergic skin reaction.

Safety Data Sheet DIGRAIN ONE SHOT

-  Warning, STOT SE 3, May cause drowsiness or dizziness.
-  Warning, Aquatic Acute 1, Very toxic to aquatic life.
-  Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements

Symbols:



Danger

Hazard statements:

- H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H336 May cause drowsiness or dizziness.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P251 Do not pierce or burn, even after use.
- P261 Avoid breathing spray.
- P273 Avoid release to the environment.
- P302+P352 IF ON SKIN: Wash with plenty of water/...
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special Provisions:

- P102 Keep out of reach of children.
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Contents

propan-2-ol; isopropyl alcohol; isopropanol
HYDROCARBONS C9-C10 N-ALKANESISOALKANES, CYCLICS
Permethrin

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

This SDS concerns a mixture, see 3.2.


3.2. Mixtures


Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

1.46% Permethrin

Index number: 613-058-00-2, CAS: 52645-53-1, EC: 258-067-9

Xn,Xi,N; R20/22-43-50/53

 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

 4.1/A1 Aquatic Acute 1 H400

 4.1/C1 Aquatic Chronic 1 H410

 3.1/4/Oral Acute Tox. 4 H302

 3.1/4/Inhal Acute Tox. 4 H332

>50% 1,1,1,2-Tetrafluoroethane

CAS: 811-97-2, EC: 212-377-0

 2.5/C Compr. Gas H280

< 20% propan-2-ol; isopropyl alcohol; isopropanol

Index number: 603-117-00-0, CAS: 67-63-0, EC: 200-661-7

F,Xi; R11-36-67

 2.6/2 Flam. Liq. 2 H225


 3.3/2 Eye Irrit. 2 H319

 3.8/3 STOT SE 3 H336

< 20% HYDROCARBONS C9-C10 N-ALKANESISOALKANES, CYCLICS

REACH No.: 01-2119471843-32, EC: 927-241-2

Xn; R10-52/53-65-66-67

 2.6/3 Flam. Liq. 3 H226

 3.8/3 STOT SE 3 H336

 3.10/1 Asp. Tox. 1 H304

4.1/C3 Aquatic Chronic 3 H412

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Safety Data Sheet DIGRAIN ONE SHOT

Wash thoroughly the body (shower or bath).

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

- CO2
- Powder
- Sand
- Water with additives

Extinguishing media which must not be used for safety reasons:

Water jet.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand.

6.3. Methods and material for containment and cleaning up

Rapidly recover the product. To do so, wear a mask and protective clothing.
Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Do not expose to temperature exceeding 50 ° C
Keep out of reach of children
Do not smoke
Keep in a dry and cool place.
Store away from: open flame, direct sunlight, sparks, heat.
Always keep the containers tightly closed.
Always keep in a well ventilated place.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

propan-2-ol; isopropyl alcohol; isopropanol - CAS: 67-63-0
ACGIH, 200 ppm, 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair
DNEL Exposure Limit Values
N.A.
PNEC Exposure Limit Values
N.A.

8.2. Exposure controls

Eye protection:
Avoid contact with eyes
Protection for skin:
Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Protection for hands:
Wear gloves
Wash hands after handling.
Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:
None

Environmental exposure controls:
Avoid release in the environment
Avoid release in watercourses and sewers

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour:	Colorless to slightly yellow liquid
Odour:	Characteristic
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	12 ° C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	N.A.
Solubility in water:	N.A.
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.

9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

Toxicological information of the main substances found in the mixture:

1,1,1,2-Tetrafluoroethane - CAS: 811-97-2

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat : > 500000 ppm

Permethrin - CAS: 52645-53-1

a) acute toxicity:

Test: LD50 - Route: oral - Species: Rat : > 2000 mg/Kg

Test: LD50 - Route: dermal - Species: Rat : > 2000 mg/Kg

Test: LC50 - Route: Inhalation - Species: Rat : > 0.45 mg/L

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

1,1,1,2-Tetrafluoroethane - CAS: 811-97-2

a) Aquatic acute toxicity:

Endpoint: LC50 *Onchorhynchus mykiss* = 450 mg/L - Duration h: 96

Endpoint: EC50 *Daphnia magna* = 930 mg/L - Duration h: 48

Permethrin - CAS: 52645-53-1

a) Aquatic acute toxicity:

Endpoint: LC50 Fish = 0.0089 mg/L - Duration h: 96

Endpoint: LC50 *Daphnia* = 0.020 mg/L - Duration h: 24

Endpoint: EC50 Algae > 0.011 mg/L - Duration h: 72

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number
ADR-UN number: 1950

14.2. UN proper shipping name
ADR-Shipping Name: UN1950 Aerosols, flammable, 2.1, 5F (D)

14.3. Transport hazard class(es)
ADR-Class: 2.1

14.4. Packing group
N.A.

14.5. Environmental hazards
Marine pollutant: Marine pollutant
Most important toxic component: Permethrin

14.6. Special precautions for user
N.A.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Dir. 2006/8/EC
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 453/2010 (Annex I)
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)

Restrictions related to the product or the substances contained according to Annex XVII
Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
Restrictions related to the product:
Restriction 3
Restriction 40

Safety Data Sheet DIGRAIN ONE SHOT

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of phrases referred to in Section 3:

R10 Flammable.

R11 Highly flammable.

R20/22 Harmful by inhalation and if swallowed.

R36 Irritating to eyes.

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

H280 Contains gas under pressure; may explode if heated.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H412 Harmful to aquatic life with long lasting effects.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Safety Data Sheet DIGRAIN ONE SHOT

	Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
CSR:	Chemical safety report
DNEL:	Derived No Effect Level.
EC50:	
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
N.A.:	Not available
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
UN:	United Nations
WGK:	German Water Hazard Class.